WHAT IS CLAIMED IS:

1. A method of manufacturing a thin film transistor array panel, the method comprising:

forming a gate conductor on an insulating substrate;

forming a gate insulating layer;

forming a semiconductor member;

forming a data conductor; and

forming a pixel electrode connected to the drain electrode,

wherein the gate conductor, the data conductor, and the pixel electrode are formed using a single etchant.

2. The method of claim 1, wherein the etchant comprises about 50-60% H_3PO_4, about 6-10% HNO_3, about 15-25% CH_3COOH, about 2-5% stabilizer, and deionized water.

3. The method of claim 2, wherein the stabilizer comprises oxy-hydride inorganic acid represented by $M(OH)_XL_Y$, where M includes at least one of Zn, Sn, Cr, Al, Ba, Fe, Ti, Si and B, L includes at least one of H_2O, NH_3, CN and NH_2R (where R is alkyl group), X is 2 or 3, and Y is 0, 1, 2 or 3.

4. The method of claim 3, wherein the gate conductor comprises a lower film of Al or Al alloy and an upper film of Mo or Mo alloy.

5. The method of claim 4, wherein the lower film and the upper film comprises Al-Nd and MoW, respectively.

6. The method of claim 4, wherein the data conductor comprises Mo or Mo alloy.

7. The method of claim 6, wherein the pixel electrode comprises IZO.

8. The method of claim 7, wherein the lower layer of the gate conductor, the upper layer of the gate conductor, the data conductor, and the pixel electrode have thickness of about 1,500-3,000 Å, about 300-600 Å, about 1,500-3,000 Å, and about 800-1,000 Å, respectively.

9. The method of claim 1, wherein the etchant comprises about 65-75% H_3PO_4, about 0.5-4% HNO_3, about 9-13% CH_3COOH, about 2-5% stabilizer, and deionized water.

10. The method of claim 9, wherein the stabilizer comprises oxy-hydride inorganic acid represented by $M(OH)_XL_Y$, where M includes at least one of Zn, Sn, Cr, Al, Ba, Fe, Ti, Si and B, L includes at least one of H_2O, NH_3, CN and NH_2R (where R is alkyl group), X is 2 or 3, and Y is 0, 1, 2 or 3.

11. The method of claim 10, wherein the gate conductor comprises a lower film of Al or Al alloy and an upper film of Mo.

12. The method of claim 11, wherein the lower film comprises Al-Nd.

13. The method of claim 11, wherein the data conductor comprises a bottom layer of Mo, an intermediate layer of Al or Al alloy, and a top layer of Mo.

14. The method of claim 13, wherein the pixel electrode comprises IZO.

15. A method of manufacturing a thin film transistor array panel, the method comprising:

forming a gate conductor on an insulating substrate;

forming a gate insulating layer;

forming a semiconductor member;

forming a data conductor; and

forming a pixel electrode connected to the drain electrode,

wherein at least one of the gate conductor, the data conductor, and the pixel electrode are formed by using an etchant including a phosphoric acid of about 50-60%, a nitric acid of about 6-10%, an acetic acid of about 15-25%, a stabilizer of about 2-5% stabilizer, and deionized water, or an etchant including a phosphoric acid of about 65-75%, a nitric acid of about 0.5-4%, an acetic acid of about 9-13%, a stabilizer of about 2-5% stabilizer, and deionized water,

wherein the stabilizer includes oxy-hydride inorganic acid represented by $M(OH)_XL_Y$, where M includes at least one of Zn, Sn, Cr, Al, Ba, Fe, Ti, Si and B, L includes at least one of H_2O, NH_3, CN and NH_2R (where R is alkyl group), X is 2 or 3, and Y is 0, 1, 2 or 3.

16. The method of claim 15, wherein at least two of the gate conductor, the data conductor, and the pixel electrode comprise at least one of Mo, Mo alloy, Al, Al alloy, and IZO.

17. The method of claim 15, wherein each of the gate conductor, the data conductor, and the pixel electrode comprises at least one of Mo, Mo alloy, Al, Al alloy, and IZO.

18. An etchant for a signal wire, the etchant comprising:

a phosphoric acid of about 50-60%;

a nitric acid of about 6-10%;

an acetic acid of about 15-25%;

a stabilizer of about 2-5% stabilizer; and

deionized water,

wherein the stabilizer includes oxy-hydride inorganic acid represented by $M(OH)_XL_Y$, where M includes at least one of Zn, Sn, Cr, Al, Ba, Fe, Ti, Si and B, L includes at least one of H_2O, NH_3, CN and NH_2R (where R is alkyl group), X is 2 or 3, and Y is 0, 1, 2 or 3.

19. An etchant of claim 18, wherein the etchant is used for patterning an Al or Al alloy layer, a Mo or Mo alloy layer, and multiple layers including an Al or Al alloy layer and a Mo or Mo alloy layer.

20. An etchant of claim 18, wherein the etchant is used for patterning an IZO layer.

21. An etchant for a signal wire, the etchant comprising:

a phosphoric acid of about 65-75%;

a nitric acid of about 0.5-4%;

an acetic acid of about 9-13%;

a stabilizer of about 2-5% stabilizer; and

deionized water,

wherein the stabilizer includes oxy-hydride inorganic acid represented by $M(OH)_XL_Y$, where M includes at least one of Zn, Sn, Cr, Al, Ba, Fe, Ti, Si and B, L includes at least one of H_2O, NH_3, CN and NH_2R (where R is alkyl group), X is 2 or 3, and Y is 0, 1, 2 or 3.

22. An etchant of claim 21, wherein the etchant is used for patterning an Al or Al alloy layer, a Mo or Mo alloy layer, and multiple layers including an Al or Al alloy layer and a Mo or Mo alloy layer.

23. An etchant of claim 21, wherein the etchant is used for patterning an IZO layer.

24. An etchant of claim 21, wherein the etchant is used for patterning multiple layers including an Al or Al alloy layer, a Mo layer, and an IZO layer.

25. An etchant of claim 21, wherein the etchant is used for patterning multiple layers including a Mo layer, an Al or Al alloy layer, and a Mo layer deposited in sequence.